

CLAIMS

1. A polyisobutylene-polyolefin copolymer produced by cationic polymerization in the presence of a vinylidene-terminated polyolefin macromonomer to produce a polymer
5 segment mainly composed of isobutylene.

2. The polyisobutylene-polyolefin copolymer according to claim 1, wherein the cationic polymerization is living cationic polymerization.

3. The polyisobutylene-polyolefin copolymer according to
10 claim 1 or 2, wherein the vinylidene-terminated polyolefin macromonomer is a vinylidene-terminated polypropylene macromonomer.

4. A composition comprising the polyisobutylene-polyolefin copolymer according to any one of claims 1 to 3
15 and a polyolefin resin.

5. The composition according to claim 4, wherein the polyolefin resin is polypropylene, a propylene copolymer, or a mixture thereof.

6. A process for producing a polyisobutylene-polyolefin
20 copolymer, comprising performing cationic polymerization in the presence of a vinylidene-terminated polyolefin macromonomer to produce a polymer segment mainly composed of isobutylene.

7. The process according to claim 6, wherein the cationic
25 polymerization is living cationic polymerization.

8. The process according to claim 6 or 7, wherein the vinylidene-terminated polyolefin macromonomer is a vinylidene-terminated polypropylene macromonomer.